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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/602,687	06/25/2003	Masayuki Takami	1-437	1359

23400 7590 03/16/2007		EXAMINER
POSZ LAW GROUP, PLC 12040 SOUTH LAKES DRIVE SUITE 101 RESTON, VA 20191		SHORTLEDGE, THOMAS E

ART UNIT	PAPER NUMBER
2626	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/16/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some * c)☐ None of:

       1.☒ Certified copies of the priority documents have been received.

       2.☐ Certified copies of the priority documents have been received in Application No. _____ .

       3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____ .

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____ .

DETAILED ACTION

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2.   Claims 1, 2, 7, 8 and 13-15 are rejected under 35 U.S.C. 102(e) as being

anticipated by Kojima et al. (US 7,035,806 B2).

        As to claims 1 and 14, Kojima et al. teach a voice control system that recognizes

a speech uttered by a user to thereby control a device that has a plurality of operating

states (a voice recognition system for recognizing speech to control numerous different

operating states within different available programs, col. 8, lines 20-32), comprising:

        a storing unit for storing speech recognition data including a plurality of reference

commands (recognized words or a grammar stored in advance, col. 8, lines 10-15);

        a detecting unit for detecting a certain operating state of the device (detecting the

status of programs that are currently running, col. 10, lines 5-12);

a designating unit for designating, based on the certain operating state,
selectable reference commands from the reference commands, wherein the selectable
reference commands can be selected in the certain operating state; and a speech
recognizing unit for recognizing the speech as one of the selectable reference
commands (detecting the status of the desired program to be controlled through the
voice commands, where when the program is found to be inactive, commands are
selected that notify to the user that such an input is unavailable at the present time, and
when the program is active, specific commands are available to control such program,
col. 13, lines 45-65 and col. 14, lines 15-40).

As to claim 2, Kojima et al. teach wherein the speech recognition data are stored
in the storing unit with being divided into a plurality of voice data portions based on the
operating states of the device, wherein a certain voice data portion includes the
selectable reference commands that can be selected in the certain operating state, and
wherein the designating unit designates the selectable reference commands by
selecting the certain voice data portion based on the certain operating state (storing the
data for speech recognition based on the program it is intended to control, where each
data set corresponding to a program has a selectable command, allowing the user to
use speech input to control a specific status of a program, col. 8, lines 5-10, 34-40 and
40-51).

As to claims 7 and 15, Kojima et al. teach:

a storing unit for storing speech recognition data including a plurality of reference

commands (recognized words or a grammar stored in advance, col. 8, lines 10-15);

a speech recognizing unit for recognizing the speech as a recognized reference

command included commands stored in the storing unit (a voice recognition system for

recognizing speech to control numerous different operating states within different

available programs, col. 8, lines 20-32);

in the reference a detecting unit for detecting a certain operating state the device

(detecting if a particular operation or program is currently running, (col. 10, lines 20-42);

a substituting unit for determining whether each of the reference commands is a

selectable reference command that can be selected in the certain operating state, and

for substituting, when the recognized reference command is determined to be not the

selectable reference command, one of the selectable reference commands for the

recognized reference command (when a program is found not to be active, the

commands for that program are made unavailable, and any input command for that

inactive program is substituted with a "Globalcommand" in the current running program,

alerting the user of the status of the program the user is attempting to command, col.

13, lines 45-60).

As to claim 8, Kojima et al. teach wherein the recognizing unit computes

concordance rate between the speech and each of the reference commands, and

selects, as the recognized reference command, a highest concordant reference

command that has a highest concordance rate among the reference commands

(determining how well the input speech matches a reference command, and selecting a

recognition result based on this judgment, col. 16, lines 50-65) wherein, when the

recognized reference command is determined to be not the selectable reference

command, the substituting unit substitutes, for the recognized reference command, a

given reference command that is one of the selectable reference commands and has a

highest concordance rate among the selectable reference commands (when the

command is determined to be not available, a global command is selected, best able to

inform the user of the status of the program to be controlled, col. 13, lines 45-60, and

col. 14, lines 15-25).

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 3-6 and 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Kojima et al. as applied to claims 1 and 7 above, in further view of Kaneyoshi (JP

2000-020086).

As to claim 3, Kojima et al. do not teach wherein the designating unit assigns, based on the certain operating state, one of a first code and a second code to the reference commands, wherein the first code is assigned to a reference command that is able to be selected in the certain operating state while the second code is assigned to a reference command that is unable to be selected in the certain operating state, and wherein the designating unit designates the selectable reference commands by selecting the reference command having the first code.

However, Kaneyoshi teaches based on the operating state, a dictionary is called making the certain speech inputs available and other speech inputs not available, where inputs supplied by the user are matched only against the stored speech inputs that are available (paragraphs 6-8).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the methods of Kojima et al. with the scaling of speech recognition dictionaries taught by Kaneyoshi to create a voice recognition unit able to decrease an incorrect recognition of the incoming speech, as taught by Kaneyoshi (paragraph 4).

As to claim 4, Kojima et al. do not teach wherein, when the certain operating state is a first operating state where the device is being turned on, the selectable reference commands do not include a reference command that controls the device for being tuned on, but the selectable reference commands include a reference command that controls the device for being turned off, and wherein, when the certain operating

state is a second operating state where the device is being turned off, the selectable

reference commands do not include a reference command that controls the device for

being tuned off, but the selectable reference commands include a reference command

that controls the device for being turned on.

However, Kaneyoshi teaches based on the operating state, a dictionary is called

making the certain speech inputs available and other speech inputs not available, where

inputs supplied by the user are matched only against the stored speech inputs that are

available (paragraphs 6-8). Where it would have been obvious to one of ordinary skill in

the art at the time of the invention that commands such as "off" would be made

unavailable when the status is set to "off" and "on" when the status is set to "on" since

such commands during such states would cause the system to have to report an

incorrect recognition, and Kaneyoshi teaches scaling the dictionary for the recognizer to

decrease when an incorrect recognition would occur (paragraph 4).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time of the invention to combine the methods of Kojima et al. with the scaling of speech

recognition dictionaries taught by Kaneyoshi to create a voice recognition unit able to

decrease an incorrect recognition of the incoming speech, as taught by Kaneyoshi

(paragraph 4).

As to claim 5, Kojima et al. do not teach wherein, when the certain operating

state is a first operating state where a function of the device is functioning, the

selectable reference commands do not include a reference command that controls the

function of the device for functioning, but the selectable reference commands include a

reference command that controls the function of the device for ceasing, and wherein,

when the certain operating state is a second operating state where a function of the

device is ceasing, the selectable reference commands do not include a reference

command that controls the function of the device for ceasing, but the selectable

reference commands include a reference command that controls the function of the

device for functioning.

However, Kaneyoshi teaches based on the operating state, a dictionary is scaled

making the certain speech inputs available and other speech inputs not available, where

inputs supplied by the user are matched only against the stored speech inputs that are

available (paragraphs 6-8). Where it would have been obvious to one of ordinary skill in

the art at the time of the invention that commands such as "off" would be made

unavailable when the status is set to "off" and "on" when the status is set to "on" since

such commands during such states would cause the system to have to report an

incorrect recognition, and commands to control a device, as functionality would be

made unavailable since these too would cause the system to have to report an incorrect

recognition. It would have been obvious to one of ordinary skill in the art, since

Kaneyoshi teaches scaling the dictionary for the recognizer to decrease when an

incorrect recognition would occur (paragraph 4).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time of the invention to combine the methods of Kojima et al. with the scaling of speech

recognition dictionaries taught by Kaneyoshi to create a voice recognition unit able to

decrease an incorrect recognition of the incoming speech, as taught by Kaneyoshi (paragraph 4).

As to claim 6, Kojima et al. do not teach wherein the certain operating state is an operating state where a function of the device is functioning, wherein the function of the device functions in multiple steps, and each of a given group of reference commands controls the function of the device for moving into one of the multiple steps, and wherein the given group of reference commands are included in the selectable reference commands that can be selected in the certain operating state.

However, Kaneyoshi teaches based on the operating state, a dictionary is scaled making the certain speech inputs available and other speech inputs not available, where inputs supplied by the user are matched only against the stored speech inputs that are available (paragraphs 6-8). Where it would have been obvious to one of ordinary skill in the art at the time of the invention that commands such as "off" would be made unavailable when the status is set to "off" and "on" when the status is set to "on" since such commands during such states would cause the system to have to report an incorrect recognition, and commands to control a specific step would only be made available when that step is available, since other commands would cause the system to have to report an incorrect recognition. It would have been obvious to one of ordinary skill in the art, since Kaneyoshi teaches scaling the dictionary for the recognizer to decrease when an incorrect recognition would occur (paragraph 4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the methods of Kojima et al. with the scaling of speech recognition dictionaries taught by Kaneyoshi to create a voice recognition unit able to decrease an incorrect recognition of the incoming speech, as taught by Kaneyoshi (paragraph 4).

As to claim 9, Kojima et al. do not teach wherein the substituting unit includes a list including mis-recognizable reference commands that are apt to be mis-recognized with respect to each of the reference commands, and wherein, when the recognized reference command is determined to be not the selectable command, the substituting unit determines, with referring to the list with respect to the recognized reference command, one of the mis-recognizable reference command that is to be substituted.

However, Kaneyoshi teaches a set of substitutable commands for input commands that are not correctly recognized in reference to the status of the application (paragraphs 8-10).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the methods of Kojima et al. with the scaling of speech recognition dictionaries taught by Kaneyoshi to create a voice recognition unit able to decrease an incorrect recognition of the incoming speech, as taught by Kaneyoshi (paragraph 4).

As to claim 10, Kojima et al. do not teach wherein, when the recognized reference command is one of a reciprocal pair of two reference commands that are for working oppositely to each other and the recognized reference command is determined to be not the selectable reference command, the substituting unit substitutes the other of the reciprocal pair for the recognized reference command.

However, Kaneyoshi teach when a command is mis-recognized, selecting another command from a scaled dictionary. Further, Kaneyoshi teach that using an alternative command when one is unavailable, and the input is found to be invalid (paragraphs 9-11).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the methods of Kojima et al. with the scaling of speech recognition dictionaries taught by Kaneyoshi to create a voice recognition unit able to decrease an incorrect recognition of the incoming speech, as taught by Kaneyoshi (paragraph 4).

As to claim 11, Kojima et al. do not teach wherein the reciprocal pair include an enabling reference command and a disabling reference command, and wherein the enabling reference command is for enabling one of that the device is running and that a function of the device is functioning, while the disabling reference command is for disabling one of that the device is running and that the function of the device is functioning.

However, Kaneyoshi teach when a command is mis-reconized, selecting another command from a scaled dictionary. Further, Kaneyoshi teach that using an alternative command when one is unavailable, and the input is found to be invalid (paragraphs 9-11). Where it would have been obvious to one of ordinary skill in the art at the time of the invention that commands such as "off" would be made unavailable when the status is set to "off" and "on" when the status is set to "on" since such commands during such states would cause the system to have to report an incorrect recognition, and Kaneyoshi teaches scaling the dictionary for the recognizer to decrease when an incorrect recognition would occur (paragraph 4), and these commands would be paired in the dictionary for easy and efficient access.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the methods of Kojima et al. with the scaling of speech recognition dictionaries taught by Kaneyoshi to create a voice recognition unit able to decrease an incorrect recognition of the incoming speech, as taught by Kaneyoshi (paragraph 4).

As to claim 12, Kojima et al. do not teach wherein the certain operating state of the device is an operating state where a function of the device is functioning, wherein the function of the device functions in multiple steps, wherein each of the reciprocal pair controls the function of the device for moving into one of the multiple steps, and wherein, even when the recognized reference command is one of the reciprocal pair and is determined to be not the selectable reference command, the substituting unit

does not substitute the other of the reciprocal pair for the recognized reference command.

However, Kaneyoshi teaches based on the operating state, a dictionary is scaled making the certain speech inputs available and other speech inputs not available, where inputs supplied by the user are matched only against the stored speech inputs that are available (paragraphs 6-8). Where it would have been obvious to one of ordinary skill in the art at the time of the invention that commands such as "off" would be made unavailable when the status is set to "off" and "on" when the status is set to "on" since such commands during such states would cause the system to have to report an incorrect recognition, and commands to control a specific step would only be made available when that step is available, since other commands would cause the system to have to report an incorrect recognition. It would have been obvious to one of ordinary skill in the art, since Kaneyoshi teaches scaling the dictionary for the recognizer to decrease when an incorrect recognition would occur (paragraph 4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the methods of Kojima et al. with the scaling of speech recognition dictionaries taught by Kaneyoshi to create a voice recognition unit able to decrease an incorrect recognition of the incoming speech, as taught by Kaneyoshi (paragraph 4).

Conclusion

5.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

      Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas E. Shortledge whose telephone number is (571)272-7612. The examiner can normally be reached on M-F 8:00 - 4:30.

      If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (571)272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

      Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TS
3/14/07

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